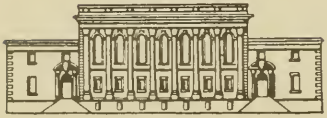
SWEET BRIAR COLLEGE
3 2449 0312732 /

SWEET
BRIAR
COLLEGE
LIBRARY



Unacc.

Digitized by the Internet Archive
in 2010 with funding from
Lyrasis Members and Sloan Foundation

http://www.archive.org/details/effectsofsocials00plat

EFFECTS OF SOCIAL SUPPORT AND SELF-ESTEEM UPON STRESS IN FEMALE COLLEGE STUDENTS

Honors Thesis

Deirdre Alexandra Platt
Class of 1983
Sweet Briar College

EFFECTS OF SOCIAL SUPPORT AND SELF-ESTEEM UPON STRESS IN FEMALE COLLEGE STUDENTS

Deirdre Alexandra Platt

Honors Thesis

Sweet Briar College

Approval:

Brent M. Shea, Ph.D., Assistant Professor of Sociology, Sweet Briar College

Phyllis W. Stevens

Phyllis W. Stevens, Ph.D., Professor of Psychology, Sweet Briar College

Gerda McCahan

Gerda McCahan, Ph.D., Professor of Psychology, Furman University

Thesis Defense: April 22, 1983

Archives
BF
575
.S75
P53
1983

[illegible]

[illegible]

[illegible]

[illegible]

* * *

Effect of social support and self-esteem upon

stress in female college students.

I INTRODUCTION

This study was undertaken to determine the nature and effectiveness of social support as a moderator of everyday stressors capable of inducing stress in college students. Can family or friends buffer students against stress? Do those with less frequent social interactions or with fewer close friends, suffer higher rates of illness and emotional breakdown compared to those who spend more time with friends or relatives or who participate more in social activities? If the correlation between social support and health has been fairly well established in studies on victims of mass disasters, or groups subject to the strains of unemployment and other demanding life-events, would it still appear among students leading a relatively uneventful life at an undergraduate institution?

II LITERATURE REVIEW

Much investigation of social networks in relation to stress in samples from populations recovering from a major crisis, or undergoing a highly critical and intense life-change, is highly consistent with the theory that social support systems serve as a moderator or protective agent against the ill-effects of such stressors upon subjects' mental and/or physical health (Brown et al, 1975; Cassel, 1974, 1976; Cobb, 1976; Cooke & Greene, 1981; Dean & Lin, 1977; Drabek et al., 1975; Eaton, 1978; Hansson, 1979; Hotaling et al., 1978; Perry & Lindell, 1978; Paykel et al., 1980; Rabkin & Streuning, 1976).

Lower susceptibility to, and speedier recovery from, health problems in these studies, correlate with high social support; health disorders among subjects with lower social support are more frequent, more serious,and longer lasting. Findings are less consistent,however, among the relatively few studies which have sought a direct relationship between social support and health in the absence of highly disruptive events (Frydman,1981). Cassel(1976)denies that poorly supported subjects are at greater risk of illness unless they are also exposed to a significant stressor(severe life-event,high life change score,etc),but other researchers claim to find significant correlations between inadequate support alone and emotional and/or somatic disorders(Berkman & Syme, 1979; Gore,1978; Lin et al.,1979; Miller & Ingham,1976).

These contradictory conclusions as to the importance of social support relative to circumstances or of the lack of support in itself,may in part be associated with the highly variable criteria used to assess social support systems. A recommendation by Rutter(1981) that future researchers examine relations beyond the family suggests that a number of studies may have neglected to consider potentially significant sources of support.Dean & Lin(1977)also lament the inadequacy of former measures of support. A failure to include such items could result in underestimations of the differences between pertinent high versus low support groups. The more broadly defined concept includes membership in various primary groups and shared activities(clubs,sport teams,church,etc)as well as kin and non-kin relationships(Bradburn & Caplovitz,1965; Eaton, 1978; Frydman,1981; Henderson,1979; Jenkins,1977; Lin, 1967). Brown et al. (1975)demonstrate the interest of a qualitative rather than purely quantitative evaluation of social ties,finding significance at the level of the "confidant" relationship. He defined a "confidant"a person to whom one revealed oneself without discomfort and could go to talk to when

[illegible] the notion of [illegible] encouragement [illegible] "[illegible]" (Cobb & Brown [illegible]) [illegible] interaction was found to be [illegible] (1972) and Fawzy et al. (1990) [illegible] physical health. In the absence of a severe [illegible] at the onset of [illegible] the assumption of the [illegible] social [illegible] and high life-change scores [illegible] and mental [illegible] in these individuals can [illegible]

[illegible] could measure and for which we could [illegible]. College [illegible]

[illegible]

[illegible]

[illegible]

III. HYPOTHESES AND VARIABLES

[illegible]

[illegible]

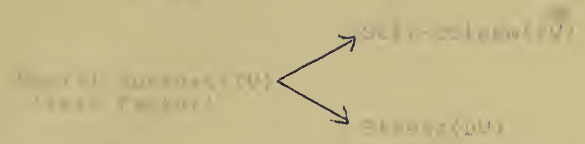
[illegible]

"SE" here refers to a [illegible] between [illegible] and social inter-[illegible] from [illegible] relationships [illegible] with a [illegible] group [illegible]. "SE" indicates one's level of satisfaction or dissatisfaction with one's [illegible] in social and academic [illegible] rather than [illegible] school achievement. It measures the [illegible] own feelings of attainment or failure in what most concerns them. The assumption is that the greater the discrepancy between goals and perceived accomplishments indicated by lower SE scores, the greater the [illegible] stress.

The term "Stress" has been used in various ways by different researchers. [illegible] it is taken to the demands upon the individual [illegible] resulting from a failure to cope with such pressures [illegible]. [illegible] research on stress [illegible] stress as [illegible] from the "stressor" [illegible] the organism's defense [illegible] "stages of [illegible]" [illegible] "stress" [illegible] rather [illegible] which takes different forms [illegible] mental [illegible]

relationship between SS and stress [illegible] relationship as "due to" [illegible] self-esteem [illegible] [illegible] (SE).

Fig.1



2 The alternative is SE which relates SS directly to SE which is in turn directly related to Stress (Fig.2). Here we propose that people with high SS are more likely to have high SE, and that high SE tends to act as a buffer against stress; SS is not directly affecting stress. We test this by controlling for SE [illegible] of intervening between these two variables. If the relationship between SS and stress disappears we then conclude that it was indeed "due to" the test-factor SE acting as an intervening variable (Rosenberg, 1968).

Fig.2

Social Support——→ Self-esteem——→ Stress

(IV) (test-factor) (DV)

Using these control procedures we will also control for other measured variables which may affect the relations between the IV, SS and SE, and the DV, Stress. Furthermore, we will disaggregate the variables SS and Stress into the subvariables established for each. The two components of SS represent the notion of appraisal on the one hand [illegible] the extent of social participation and number of acquaintances on the other [illegible] some studies found the latter to be sufficient while some concluded that the former are essential to buffer against stress.

[illegible] component of [illegible] is [illegible]

related to Type A more closely than the other components (Brown et al., [illegible] Fowler et al '80), Social [illegible] is likely to [illegible] with [illegible] & [illegible] (1987), Stress may itself be subdivided into physical and psychological demands. In the literature only [illegible] been assessed [illegible] (Milholland & [illegible] 1976) [illegible] suggest that the physical effects may be more easily suffered by [illegible] A number of studies [illegible] have [illegible] physiological or physical reactions alone and have established significant positive correlations with SE (Brown et al., (1978); [illegible] Burns et al., (1980); [illegible] et al., 1979) [illegible] et al., (1980)). [illegible] & [illegible] (1977) conclude that "confidence" seems to shield [illegible] physical and psychological disorders while [illegible] will at most suffer minor physical ailments. The term "Phys" [illegible] psychosomatic [illegible] ranging from [illegible] ailments [illegible] such as ulcers and colitis. "Psych" covers [illegible] mental [illegible] (emotional) disturbances of which the symptoms [illegible] irritability, boredom, [illegible] feelings [illegible]).

3. RESEARCH METHODS

The data with which to test these hypotheses were collected from a random sample of full-time resident students at Sweet Briar College for women, near Lynchburg, Virginia. We have already pointed out some of the advantages in choosing a college population: less variation in [illegible] of [illegible] (Sigel [illegible]). Consequently, a greater [illegible] all-female [illegible] similar to previous findings. [illegible] ability to [illegible] the [illegible]

[illegible] 1980).

The [illegible]

[illegible]

[illegible]

[illegible] 15-20 min.

[illegible] following:

[illegible]

[illegible] (1970) with items from 2 other tests [illegible] were used for [illegible] (Tennant). Items 11-15 were not given to the sample (Grant 1975) and were therefore omitted.

27 life items were adapted from Brown et al. (1975); Cook & Wills (1978); Dohrenwend (1975); Rahe (1970); Sarason (1978); Gilles & Johnson (1967); Holmes (1967); Paykel (1975).

A complete test from any one of these sources could not be used for our purposes because of irrelevant items (pertaining to spouses or family relations) or single test covering all the events we were interested in.

-- 37 Stress indicators, established in a number of stress studies, were combined in a list developed by Gillespie (1981) as a measure of burnout. This list seemed [illegible] the most appropriate for our study (for a female sample). Other medical indexes used in life-events research (effects studies) [illegible] seemed not suitable as they were designed to pick up serious illnesses/long-term effects which would not be very common in a 'normally [illegible]' population and they tend to overlook the minor-sounding symptoms. Gillespie defines "burnout" as the 'mental and physical exhaustion' occurring among people with high expectations for themselves and "unrealistic goals"; stressful life events and other burdens increase the risk of burnout in such people. Stress as we defined it has enough in common with this notion of burnout for us to adopt the burnout checklist with limited changes.

-- In addition to measurement of vulnerability, a validity test from the MMPI, the K-scale, is included with which to control for "faking-good" from the responses to a true-false test. More than 12 "falses" is an indication of 'faking'/distorting responses in the socially desirable direction.

-- 14 items referring to life-events (from Holmes and Rahe [illegible]) [illegible] to patient life-style, [illegible] screening device

to enable us to control for original variance [illegible] negatively affected (lowered) rendering them more susceptible to stress disorders. We can then assure that correlations between the SF and high scores are not "due to" extraordinary pressures accompanying the "Crisis" or by eliminating S's with a recent history of stressful life-events and determine whether the SF-Stress relationship still holds. If so, our hypothesis is supported. If not we at least will have have provided results consistent with the many studies we cited that show social support to be a buffering of stress in crisis or post-crisis cases.

The open-ended question asks students about changes in their feelings since earlier in the semester. This may reveal how conscious they themselves are of the relationships and the role of the variables we have distinguished as well as exposing a general trend if there is one.

The survey's [illegible] questions are likely to negatively effect the response rate so efforts were made to encourage recipients to complete it anyway. [illegible] announcements in the college dining halls and a justification of the test were a major part of this effort. Although no financial reward was offered we hoped the completion of the Q. would be seen as a reward in itself and from comments either heard or written on completed Qs. this appears to have been justified (Appendix 5). Reassuringly, Q. was apparently not completed primarily by highly stressed students as one might have feared (Table I, App. 6). To help reduce bias in the nonrespondents/non-response the response related appeal was made that a fellow student needed their cooperation to complete an Honor's thesis otherwise doomed to failure. The histogram and curve (App. 3) reflect the outcomes of these attempts to increase the rate. Thanks to Cheryl [illegible]'s gentle [illegible] and consent [illegible] students could be

[illegible] personally with this questionnaire [illegible] some to all be completed by 17 September. The final response rate was just over 60% (125 respondents). This was considered adequate to generalise to the Sweet Briar student population.

A codebook provides the "translation" of each level of response into a figure which enabled the researcher to create a data file which was then compiled and analysed on computer programs.

Programs were written in Basic to compute each subject's scores for Scales,S1,S2,CONF,POP,PHYS and PSYCH Stress,Crisis and R-score.Variables were directly correlated with one another by a Pearson-correlation program,and correlated with a 3rd variable controlled for with a partial correlation program. Minitab was used for regressions,other curves,histograms,and t-tests. Most of these t-tests on the differences in means in different groups were one-tailed tests as our hypotheses specified whether we expected to find a mean higher or lower each time.

The scores for all the variables were converted to a standardised T-score,with a mean of 50 and standard deviation of 10,to facilitate comparison,but all figures and tables display the original scores.

V. RESULTS

Table 1 displays the direct correlations between all variables.

Table 1:Direct correlations between all variables.

	Stress	PHYS	PSYCH	SS	CONF	POP	SE	Crisis	X
Stress	1	.711	.832	-.307	-.277	-.249	-.355	.391	-.357
PHYS		1	.495	-.241	-.193	-.167	-.192	.383	-.204
PSYCH			1	-.234	-.220	-.202	-.319	.201	.321
SS				1	.761	.294	.404	-.223	.177
CONF					1	.482	.308	-.195	.207
POP						1	.307	-.238	.102
SE							1	-.248	.402
Crisis								1	-.262
X									1

Fig 1a) and 1b) show Stress as a function of SS and SE, respectively. Histograms, Fig 2, and additional tables are given in Appendix D. Both SS and SE were significantly negatively correlated with Stress, the respective 'r's being -.307 and -.355.

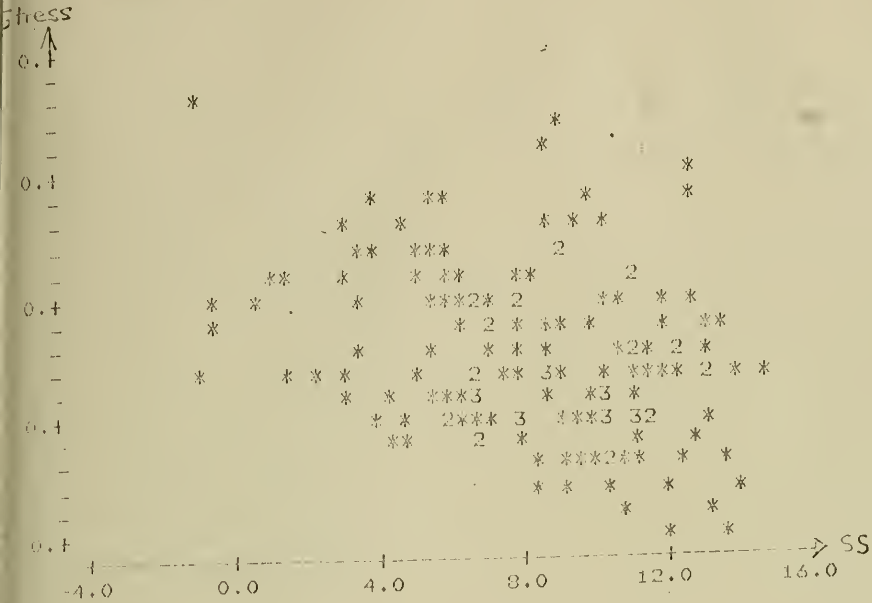


Fig 1a) Curve of Stress in function of SS.

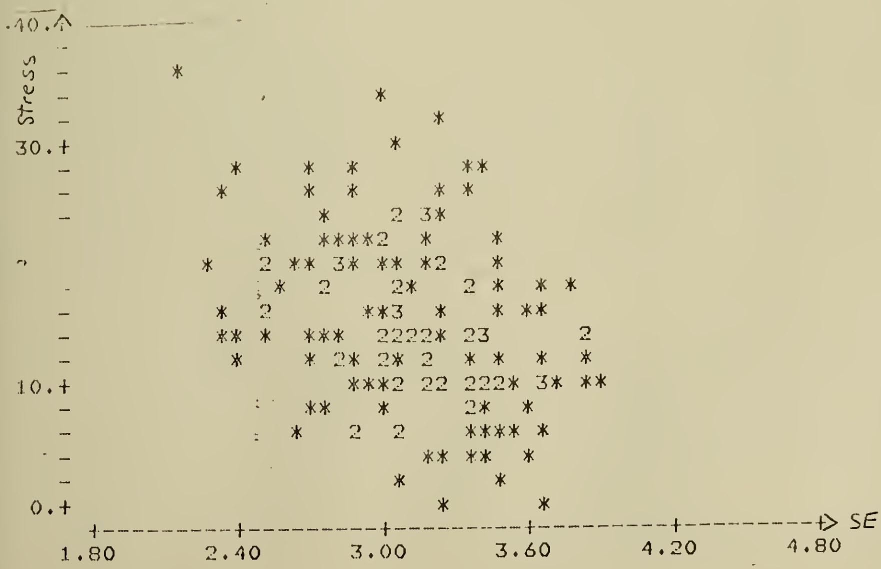


Fig 1b) Stress as a function of Socio-economic status

Relationship between Social Support and Stress:

The SS scores ranged from -.96 to 19.48 with a mean of 8.34 (SD=4.92), and median of 8.8. Stress was compared in Low and High SS groups with the cutoff point at the median, and Stress was found significantly higher (p=.0129, t=2.536, df=150).

For brevity, abbreviations for High, Medium and Low will at times be used in text and tables (respectively: Hi, Med, and Lo).

Stress scores, with a minimum of 1 and maximum of 36, also were divided at the median (14) (with the median itself included in the Low Stress category as the mean was 14.8). Table IIA shows the distribution of High and Low stress depending on level of SS. The t-test, for mean Stress in High vs Low SS groups, gave p=.006 that this difference was due to chance alone (t=2.536, df=150).

Table IIA: Stress by SS divided at the median.

		STRESS			
		Low	High	Mean	SD
SS	Low	47.4 (36)	52.6 (40)	14.49	6.5
	High	62.5 (50)	37.5 (30)	13.26	7.24

SS was further divided into High, Medium, and Low SS (see Table IIA(B)) and highly significant differences emerged between Stress levels in each category: Low vs High SS, p=.0091 (t=2.6, df=90); Low vs Med SS, p=.0013 (t=3.21, df=70); High vs Med SS, p=.00050 (t=4.25, df=94).
The Chi-square on this 3x2 table was significant at the .05 level with X2=6.1, df=2.

The patterns of distribution of High and Low Stress in these different SS groups in Table 11(b) are graphically represented in Fig 2 below. One may read, for instance, that 39% with Low SS have Low stress compared with 56% in the Med and 64% in the High SS group. Inversely, 61% of those with Low SS have High Stress while 44% with Med and 36% with High SS suffer from High Stress.

Table 11(b): Stress in High, Med. and Low SS.

S T R E S S

	Low	High	Mean	sd
Low SS	38.9 (14)	61.1 (22)	9.14	6.7
Med SS	55.8 (24)	44.1 (19)	14.4	5.7
Hi SS	64.2 (43)	35.8 (24)	12.7	7.2

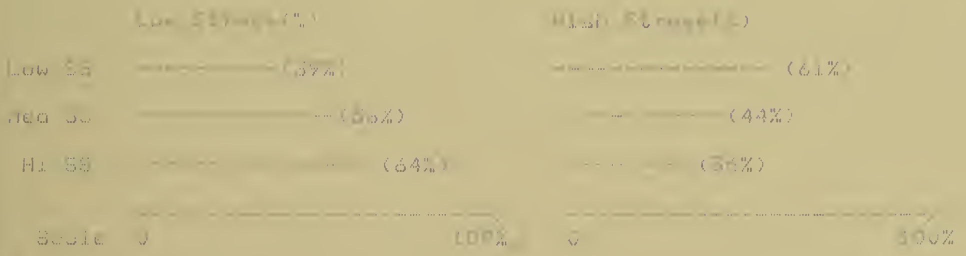


Fig 2: Percentages with high and low Stress in High, Med & Low SS.

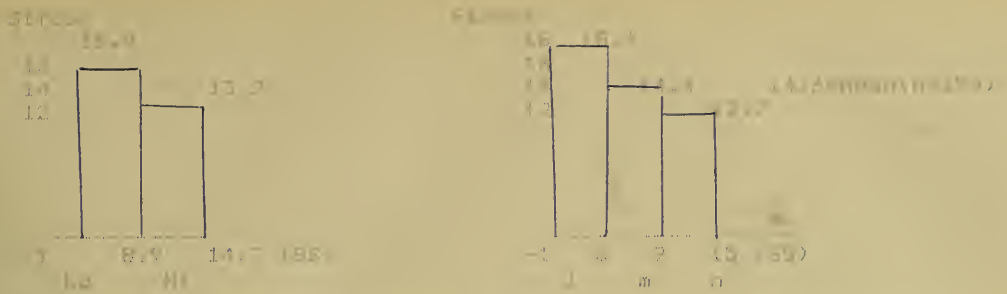


Fig.3(b)(Mean Stress for different SE levels)(compared to sample mean)

In addition,the histograms for Stress in High and Low SE(see App.D) are skewed respectively towards low and high Stress scores.

A final table for Stress by SE levels can be found in Appendix D.

Stress and Self-esteem

SE scores ranged from 1.0 to 4.4(with a mean of 3.106 (sd=.3867). Stress was compared in the Low and High SE groups(divided at the median 3.09.The t-test was highly significant(p=.0010,t=3,df=148)Stress scores were divided at the median,and the distribution is shown in Table IIIA. A Chi-square on Table IIIA was significant at the .01 level=8.2,df=1).

Table IIIA(Stress in High and Low SE)

STRESS

		Low	High	mean	sd
SE	Low	43.5 (34)	56.5 (44)	16.3	6.5
	Hi	66.6 (50)	33.3 (25)	13.8	6.7

Note: tabular values are given in percentages with frequencies in brackets.

With SE divided into High, Medium and Low SE groups, the following table and figures are obtained showing the distribution of Stress at these different levels. A pattern parallel to that for Stress by SE emerges: 38% with Low SE have Low Stress, while 59% with Med and 75% with High SE have Low Stress. Conversely 62% with Low SE, but 41% with Med SE and 25% with Hi SE had High Stress.

The t-tests on Stress at the different levels of SE are significant at the following levels (rounded off at 4 digits): for Lo vs Hi (t=5, df 54).
.04 for Lo vs Med (t=1.73, df 88)
.0095 for Med vs Hi (t=2.41, df=54)

The Chi-square on the table is significant at .01 (X^2=10.3, df=2).

Table III 5, Stress by High, Medium and Low SE.

	STRESS			
	Low	High	Mean	SD
Low SE	37.7 (17)	62.2 ([illegible])	17.9	6.5
Med SE	58.4 (45)	41.6 (32)	14.8	7.2
Hi SE	75.0 (21)	25.0 (7)	10.4	4.7

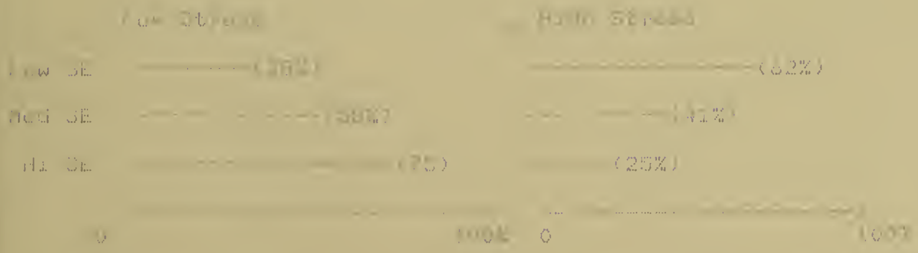


Fig. 3a, Percentages with High and Low Stress in High, Med & Low SE groups

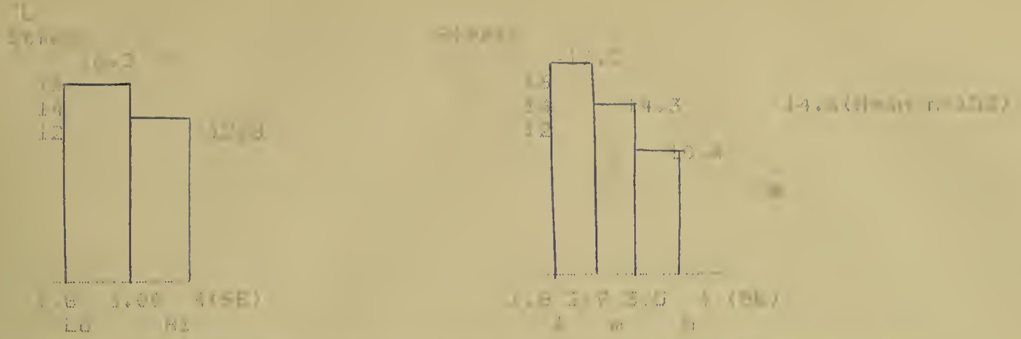


Fig 3b):Mean Stress for varying SE levels(compared to sample mean.

The histograms for Stress in Low and High SE are skewed respectively towards high and low Stress accordingly.(II).
Table VI in Appendix D shows this pattern of distribution when Stress is trichotomised into High,Med and Low.

Effects of SS and SE combined.

The correlation between SE and SS is significant and positive,as shown later(r=.26).In subjects low in both SS and SE,the mean Stress level is 17.6;in subjects high in both it is 12.1.Table IV and the figure below show the distribution of High and low Stress according to these groups.

Table IV: Stress in Groups of Low SS & Low SE and High SS & High SE.

	STRESS	
	Low	High
Low SS & Low SE	38.77(19)	61.22(30)
Hi SS & Hi SE	69.56(32)	30.43(14)

Low Stress High Stress

Lo SS & Lo SE ——————(39%) ——————————(61%)
TL
TL
Hi SS & Hi SE ————————————————(70%) ————————(30%)

0 ———————————————————————— 100% ———————————————————————— 100%

As one can see, 70% of those with good support combined with high self-esteem have Low Stress, while over 60% with poor support and low SE suffer from High Stress.

Regressions of Stress on both the IVs were run to determine which variable alone provided for stronger correlation. Together they accounted for 16% of the variance. When SE was entered first, it accounted alone for 12.7%; when SS was entered first, it explained 9.3% .

Similarly, when partial correlations eliminated the effects either of

POP was negatively and significantly correlated with Stress(r=-.25).

with Stress was SE, the decrease being more important for SS vs Stress (SS vs Stress now -.186, SE vs Stress -.266).

The median level of SS in the low stress group was 10.3 compared to 8.8 in the high stress group (high SS and medium SS respectively). The median level of SE for low stress was 3.5(high SE) and for high stress 2.9(low SE).

Social Support disinterested:

Stress and Popularity

POP was significantly negatively correlated with Stress(r=-.25).

POP scores ranged from -3.4 to 5.9, with a mean at 2.8 and sd of 1.7. Stress was compared in the High vs Low POP group split at the median 2.7 and the t-test found significant at .002(t=3.7, df=150).

In Table V and in the Figures below is shown the distribution of High and Low Stress in the High and Low POP groups.The difference is most notable for High POP with about 64% with Low vs 36% with High Stress. The Chi-square on the table was significant at .05(X^2=4.78;df=150).

Table V:Stress by High and Low Popularity.

		STRESS			
		Low	High	Mean	sd
POP	Low	46.1 (35)	53.9 (41)	14.1	7.1
	High	63.6 (49)	36.4 (28)	13.1	5.4

Low Stress High Stress

Low POP ------------(46%) ------------------ (54%)

Hi POP ---------------(64%) ----------(36%)

0 100% 0 100%

Fig 5a:Percentages of subjects in Hi & Low POP with Hi & Low Stress.

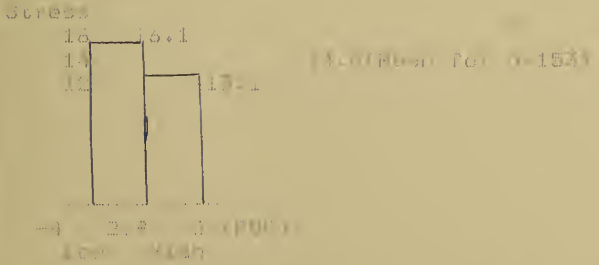


Fig 5b:Mean Stress in High & Low POP.

Median POP levels in High Stress subjects were 2.35(ie Low POP)compared to 3.0(ie:High POP) for Low Stress.

STRESS and CONFIDENCE RELATIONSHIPS

CONF scores ranged from 4.35 to 14.35 with a mean and median of 9.5 (sd=2.2). The t-test for stress in High vs Low CONF (divided at median) was significant at .0037 (t=2.83, df=148).

The Chi-square based on the frequency distribution of High and Low Stress in the High and Low CONF groups was not significant at the .05 level. Nor were the differences significant when the top 10% CONF Stress levels were compared to those of the lowest 10% CONF (Table VI.B).

Table VIA: Stress in High and Low CONF divided at the median.

		STRESS			
		Low	High	Mean	sd
CONF	Lo	49.3 (37)	50.7 (38)	16.2	5.8
	Hi	60.3 (47)	39.7 (31)	13.05	6.4

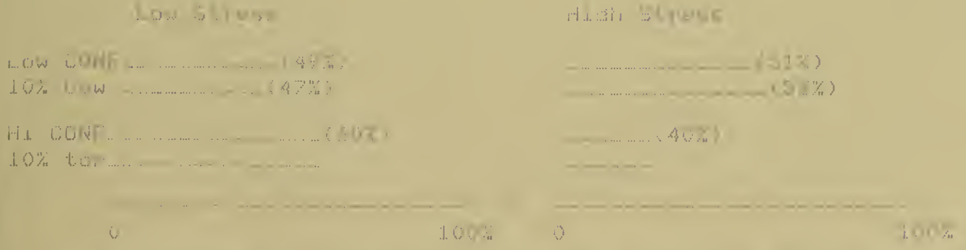


Fig 6a: Percentages in High and Low CONF groups with Hi and Lo Stress.

Table VIB:Stress in 10% Highest and 10% Lowest CONF groups.

		STRESS		
		Low	High	
CONF	10% Lowest (scores<6.4)	46.6 (7)	53.3 (8)	(15)
	10% Top (scores>12)	60 (9)	40.0 (6)	(15)

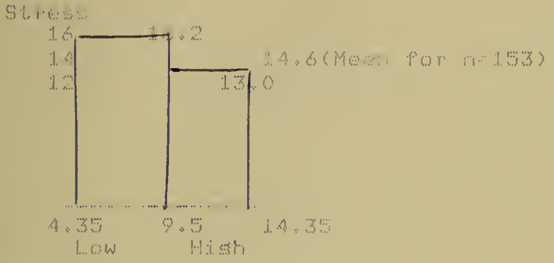


Fig 6b):Mean Stress in High & Low CONF divided at median.

An interesting observation is that the differences between High and Low Stress are again more important in the High CONF group(Tables IV and V,bottom rows)as was true for Pop and for the global SS scores(see Tables IV and V,bottom rows).

The Median CONF level for subjects low in Stress was 11.1(i.e. High CONF) as opposed to 8.1 in High stress subjects(ie Low CONF).

Relative effects of CONF and POP upon Stress

The regression of Stress upon CONF and POP,in that order,showed that together CONF and POP accounted for 9.4% of the Stress variance: CONF alone accounted for 9.0% and POP alone accounted for 6.25%.

CONF and POP were correlated with r=.48 for the total sample(n=154)but in the high stress group the correlation was .59 compared to .38 in the Low stress group.

SE was significantly correlated with both CONF and POP to about the same extent(.208 and .306).

The removal of the effects of SE by partial correlations left CONF slightly more strongly related to Stress than POP(respectively .17 and .16).

Stress disaggregated:Physical and Psychological Stress.

SE was significantly correlated only with PSYCH(r=-.32) and not with PHYS (r=-.18).

SS was significantly correlated with both PHYS and PSYCH;compared with SE,SS was more strongly related to PHYS(r=-.24) and less to PSYCH(r=-.23).

When PHYS and PSYCH were divided at their medians,the mean SS was found to differ significantly both in high vs low PHYS stress and in high vs low PSYCH stress.The t-tests were sign. respectively at .0179(t=2.136, df=76) and at .0003(t=3.563,df=62).

The median SS level in high PSYCH was 6.4 as opposed to 10.3(high SS) in low PSYCH;in high PHYS it was 7.1 compared to 9.2 in low PHYS.

For PHYS stress,r(POP)=-.166 and r(CONF)=-.193;for PSYCH stress,r(POP)=-.207and r(CONF)=-.220(see Table 2).

Mean CONF scores were found to differ significantly between High and low PSYCH at .0129 (t=2.12;df=75)and Hi and Lo PHYS at .0155(t=2.2,df=69).

SE was significantly correlated with PSYCH but not with PHYS (respectively r=-.319 vs. r=-.182); SS was more strongly correlated than SE

with PHYS(r=-.241) and [illegible] with PSYCH(r=-.234).

When SS was controlled for, SE remained significantly related to Stress and PSYCH at(r=-.261 and -.255). When SE was controlled for, the correlations between SS and the [illegible] variables became non-significant(ie. Stress, PHYS and PSYCH the partial values were -.166, -.121 and -.126 respectively(see Table VII).

Table VII:Partial correlations controlling for N,Crisis,Stress,SS & SE
[illegible]

controlled variable	N	Crisis	Stress	SS	SE
correlated variables					
SS vs Stress(-.305)	-.240	-.231			-.166
SS vs PHYS(-.241)	-.205	-.158			-.138
SS vs PSYCH(-.234)	-.170	-.163			-.127
SS vs SE(.405)	.389	.361	.323		
CONF vs Stress(-.275)	-.223	-.224			-.188
CONF vs SE(.308)	.252		.244		
POP vs Stress(-.249)	.227	-.174			-.157
POP vs SE(.307)	.251		.241		
SE vs Stress(-.302)	-.247	-.239		-.261	
SE vs PHYS(-.152)	-.090	-.077		-.096	
SE vs PSYCH(-.319)	-.219	-.243		-.255	

Other variables controlled for were Crisis, negative life-events(LE) and the "Feeling-Good" scale, both were strongly correlated with Stress and significantly related to at least one of the independent variables.

Effects of Crisis

Crisis was correlated with Stress(.270)and negatively correlated with SS and SE(respectively r=.256 and -.268).In addition,the mean Crisis in low stress subjects was 2.1(sd=2.5) and the mean in high stress subjects was 4.7(when Stress scores were divided into Hi/Lo at median;see Table I,Art. 5).The t-test on these Crisis scores was significant at .05(t=1.85,df=18).But though the range was 0 to 9,the overall Crisis mean was at 3.03(sd=2.8),corresponding to an average low number of stressful life-events.The histogram for the distribution of Crisis(see Appendix A) shows 70 [illegible] of the subjects have scores below 3, and the remaining 30% are clustered mostly between 4 and 6(maximum=9). The t-test on stress in high and low Crisis,divided at the median,was significant at .005(t=3.14,df=120).Mean Stress was 37.3 in Hi Crisis (sd=5.6) and 17.8 in Low Crisis.

Differences between SE in Hi and Lo Crisis were significant at .001 (t=3.5,df=120),as was the difference between SS in the 2 groups(t=3.2, df=120).When Crisis levels were compared in highest and lowest Stress groups(see Table I,Art.3),the t-test was significant at .05(t=1.[illegible], df=16).

PHYSical Stress was more strongly correlated with Crisis than was PSYCH, respectively (.370 and .30).This is worth noting as all other variables were either equally related or more strongly related to PSYCH.

When partial correlations were run to control for the effects of Crisis,SE remained significantly correlated with PHYS and global Stress (respectively r=-.265 and r=-.29),and SS remained significantly correlated with Stress(.22).

Besides the partial correlations run above,the variables SS and SE were correlated with Stress independently in the Low and the High Crisis

group;these correlations came out stronger in the High Crisis group and they remained significant in the Low Crisis group where subjects with more than 3 life events had been eliminated.The correlations obtained in each case are displayed below.

Table VIII:Correlations between SS,SE,and Stress for various Crisis levels.

	CRISIS		
	Global	High	Low
SE vs Stress	-.457	-.532	-.349
SS vs Stress	-.305	-.263	-.120

The curves of Stress as a function of SS and SE,when High Crisis is eliminated and when High Crisis is considered alone,can be found in App.D.

Effects of "Faking-good"(K)

K was strongly correlated with Stress(-.509) and with SE(r=.402)but K was not significantly correlated with SS(r=.17).

When partial correlations were run to control for K,the relationships between SS,SE,and Stress remained significant:for SE vs Stress,r=-.35 and for TOUCH r=-.29;for SS vs Stress,r=-.26 with K controlled for; both CORP and TOP remained sign. correlated with Stress(-.223 and -.227 respectively).

Almost 60% of the respondents had K scores no greater than 12(i.e.the cut-off point above which subjects can be suspected of "faking"); and both mean and median were less than 12.When the 90 subjects with

Low K group(19 or under)was compared with the High K students; significant differences were found in their SE level and Stress scores,but not in their SS level(t(SE)=3.1,df=124,sign.at .002; t(St)=3.6,df=124,sign.at .0005;t(SS)=.62,df=124,cannot reject at .05).

We also looked at the correlations between SS,SE and Stress independently in the Low and High K groups,to eliminate(from the former) the subjects whose response could be biasing the results.In the table below,the correlations within the High K group are stronger than the global correlations,but they remain significant in the "non-faking" group.

Table 11.Correlations for various levels of K.

	K - Groups		
	Global	High	Low
SE and Stress	-.35	.36	-.27
SS and Stress	-.30	-.36	-.25

The curves of Stress as a function of SS and SE,when"fakers" are eliminated and when only "fakers" are considered,can be found in Appendix D.

VI ANALYSIS AND DISCUSSION

In our hypotheses we predicted that SS and SE both would be significantly negatively correlated with Stress,and positively with each other.The data confirm this general hypothesis.

Social support

For SS,the significant differences established by the t-test and Chi-square,and the tables of percentages(Table II),show that the likeli-

hood of above or below average Stress in a student depends in part upon level of SS;the more social support,the less likely a student is to suffer high stress.Both tables suggest that the effects of high SS in reducing or buffering against stress are more significant than the predicted ill-effects of low SS.Compare column differences in IIB in the bottom row with those of the top row;whereas 65% of those with the highest SS have low Stress,60% of the lowest SS group have high Stress. Divided at the median;High SS subjects have a 62-63% chance of having Low Stress,while only 52% with Low SS are at risk for high Stress(IIA). If Low SS is less powerful a determinant(or at least predictor)of Stress level than is High support,it suggests that a scarcity or absence of contacts with friends and family,in this relatively unstressful environment that we have chosen,does not in itself lead to Stress.This is in agreement with Cassel's claim that the lack of SS would be likely to increase the risk of Stress if,and only if,a stressor were introduced(Cassel, 1976).

Self-esteem

Again significant F- and Chi-square tests,and percentage tables(Table III)show that the higher the IV,the lower the likelihood of high Stress. And again the low and high stress scores were more disproportionate in the High SE group than the Low,with 75% likelihood of low stress for the highest SE group,compared to 62% chance of high stress inthe lowest SE group.Respective likelihoods for High and Low SE divided at the median were 66% low and 42% High Stress.

Self-esteem seems to be a more effective buffer,like SS,when it is high than detrimental when it is low.

Social Support and Self-esteem

Because of the strong positive correlation between SS and SE, a number of subjects fall at either extreme,having High SS and High SE or Low SS and Low SE.The effects of the combinations,as one would expect, are stronger than the effects of either variable separately(compare Table IV with Tables IIA and IIIA).

In the above-median group for both variables,70% are likely to have low Stress;at the other extreme,61% are at risk for high Stress.

Although the latter combination(see above)appears to be less detrimental than the former is beneficial,61% is certainly non-negligeable.Since Low SE tends to be associated with Low SS,the need for SS to avoid high stress,in itself,emerges as more important than one might have concluded from the 52-53% risk determined above(Table IIA).

The lesser effect,repeatedly observed,of Low SS and/or SE upon Stress compared to High SS and/or SE,may be interpreted in different ways:

-Low SE and Low SS may not be significant Stressors(ie,without introducing Stressors such as major life-changes,subjects are not at much risk)

-other variables unaccounted for may be present and acting as buffers counterbalancing the ill-effects of Low SE or Low SS in the same way that SS buffers against disaster induced Stress.

-as long as either SE or SS is high ,the ill-effects of the other variable (below median) are buffered.The correlation between SS and SE is not perfect and such combinations do exist.

The second and third suggestions are more plausible since a significant risk of high Stress emerged for each variable when lowest scores were considered,ie the total lack of friends or family contacts,or exceedingly low self-esteem.

Although it is likely that other stress relieving practices,such as [illegible],may sometimes override the ill-effects of low SS and low SE,

it is clear that to many respondents now,there is no such compensation involved(low SS and low SE group).This does not imply that nothing can buffer against Stress in this extreme group(obviously),but one might wonder to what extent such students have attempted to find such a buffer in overwork or studies,drink or drugs,without success?

The third alternative still holds and reminds one of Rutter's suggestion that SE coming from a source other than high social support,such as academic achievement,can counterbalance the detrimental effects of low SS.In our Q. we would have picked up positive SE related to academics or sports,for instance,in Coopersmith's inventory(see Appendix A).

We rejoin the findings as to relative influence of SS and SE with,now, a likely explanation.

The benefit of a social support network is essentially,we believe, the positive reinforcement of our self-image and the high self-esteem that results;high SE,in itself,is an effective buffer against Stress. There are other things,however,independent of SS,which promote personal satisfaction and lead to high SE,allowing one to have a low support group without suffering from this lack if one has a firm conviction and confidence in one's success in an area that matters more to one.

Social support or Self-esteem?

Differences were consistently more significant for SE than for SS,suggesting the predominance of SE in accounting for Stress level.The multiple regressions also point this way.The effects of SS upon Stress were barely significant(-.19)with SE held constant(partial correlation), while the correlation between SE and Stress remained important(-.27)and decreased by less when SS was controlled for.Fig 2 of section III show the pattern of interaction we proposed to select given these results.

SS-------SE-------Stress

Social support may affect management of work and emotions via the basic self esteem it helps to develop.The awareness of being popular may be the basis of this high SE,but friends may have a more direct influence by openly offering encouragement and compliments(as suggested by Walton,80).

We cannot safely draw further conclusions about the relative effects and interaction of SE and SS without ensuring that we have the same trends when controlling for other variables that might be hiding or exaggerating the effects of either SS or SE.

Controlling for K

The effect of SS and SE were reevaluated in terms of K because of the strong positive correlation observed between K and Stress,and its strong negative correlation with SE.SS was insignificantly related to K.
As expected given such relationships:SS emerged equally strongly related with Stress as SE when the effects of K were removed(by partial correlation and correlating with the 'no-Tokers"group),the 2 IVs varying between correl. of -.25 and -.27 with Stress.With such strong correlations we need not question the validity of our original correlations and conclusions.

Controlling for Crises

Crisis was controlled for because of its strong predicted relation with Stress (positive)and the significant negative correlations found with the IVs.Would correlations still be significant and in the same order when we eliminated high crisis scores?
Again,both partial correlations and correlations with the Low Crisis group left us with significant correlations for SS and SE,maintaining the order found in the original correlations. Therefore it is safe to assume that our correlations and analysis still hold for a low-stress

environment.

Confiding-relationship or popularity?

We hoped to provide evidence for one or other of these interpretations of the SS - SE relationship in distinguishing between the "confiding-relationship" and the "popularity" items in SS.

Would CONF be more significantly related to Stress as it proved in several studies on highly stressed populations, than POP?

We found, in our study, that correlations and % distributions for the two did not differ very significantly, but I believe that even minor differences are worth investigating for consistency; given the subjectivity involved in associating some of the items to one category or the other and the variation in subjects' interpretation, minor differences we observed could well be underestimations reflecting larger real differences in the type of SS a subject benefits from or lacks.

We did find CONF correlations originally somewhat stronger than for POP and when Crisis was controlled for the lead was maintained, with CONF alone remaining significantly correlated with Stress. The stronger correlation between POP and Crisis compared to CONF and Crisis was unexpected given the results of life-crises studies linking the latter.

The multiple regression of Stress upon the 2 also gave CONF a slightly higher r2. On the other hand, Stress percentage distributions differed more for POP, and the control for K left POP more significantly correlated with Stress.

An interesting non-finding was the almost equal correlation of both subvariables with SE. If anything, POP emerged more strongly associated with SE, giving a partial correlation with Stress of -.16 as opposed to -.19 for CONF when SE was controlled for. If anything can be deduced from these minor differences, one might venture that popularity is more likely to enhance one's SE than are confiding relationships;

i.e.,Although the Regression model(POF is a better buffer against Stress in this low-stress environment.One might speculate that the support and buffering effect of CONF operate on something other than Self-esteem,something diffused into and only in a critical state or highly stressful situation.The comfort and caring exhibited by a "confident" may be essential to disaster victims but understandably redundant for the average college student.

The results are not inconsistent with this reasoning once R is controlled for,as mentioned above,with the correlation for POF catching up and possibly exceeding that of Conf.

Tentatively,we might conclude that the lack of Confidants does not in itself constitute a significant stressor.The tables of Stress distribution,in particular the last(VI.B.)highest and lowest 10% CONF scores), emphasize this with a truly negligible difference in High and Low Stress for the Low CONF groups,and a non-significant Chi-square on the table on the whole.

Confidants are not to be disregarded as beneficial ,however,as the High CONF groups(both above median and top 10%) had a 60% chance of Low Stress(compared to 44% in the above median POF group).A final observation is this same percentage distribution between Hi and Lo Stress in both above-median and 10% top CONF, which seems to confirm the hypothesis of "at least one" confidant being beneficial,one alone being as effective as half a dozen such relationships.

Physical vs Psychological Stress

For most of our correlations,when Stress was thus disaggregated,the IV correlated more highly with PSYCH stress,which is not consistent with Miller & Ingham's finding(77) that the more easily buffered was PHYS stress,nor with the idea that in general the PHYSical breakdown is induced by intensely stressful experiences.The latter hypothesis is supported by the one correlation for which PHYS gave a significantly

higher correlation than PSYCH: the variable Crisis.It would seem that the ill-effects in a low stress environment are mostly psychological. This would explain the relatively low correlations found with PHYS if a few of the subjects scoring above average in Stress reported physical disorders.

A univariate analysis,however,showed fairly high percentages of subjects suffered from all but the most serious physical disorder(for items 1,6-10,and 26,33%to 86% answered "yes"). The more likely reason for these findings is the relatively small number of items counted as PHYS stress compared to the large number for PSYCH stress.This makes the correlations difficult to compare,but it suggests that where we do find PHYS at least as strongly correlated as PSYCH it may actually be more strongly correlated.In particular,for SS,which had similar r's for PHYS and PSYCH,and stronger correlations with the former than were found for SE,we cannot reject the possibility that SS is more closely related (ie more strongly affecting) PHYS stress.

If this is accurate,the data support Cooke & Greene(1976) and Miller & Ingham(1977)who found high SS to buffer PHYS symptoms more effectively.

SUMMARY

We proposed 2 patterns for the interaction of our 3 main variables: either SS ———> SE ————> Stress ,where the variable directly associated with Stress is SE,or:

SE
SS
Stress

where SS directly affects Stress ,and SE is only spuriously related (Figs 1 and 2,section III).The results of the partial correlations controlling for one and the other IV and the multiple regression

of Stress than the two IV,suggest that the more direct association is that of SE and Stress.t-tests and chi-square were also more significant for SE.These results were still significant when "fakers" were eliminated(though the gap closed between SE and SS)and when High Crisis subjects were removed.

This implied that SE was directly related to Stress,while the IV SS was effective mainly by promoting SE.

A lack of SS was found to be related to higher Stress,especially if accompanied by Low SE;however,both were not inevitably associated, and,in the absence of a good support group,other protective factors (we speculate)were sometimes present and serving to decrease the risk of Stress disorders.Perhaps academic excellence,of which the subject is conscious,substitutes in some cases for low SS by enhancing SE. Although a Confidant lessens the likelihood of Stress disorders,we suggest that the more appropriate form of SS in a low-stress environment is the large and relatively loose friendship group(POP), providing more continuous SE reinforcement,and - as peers - generally more likely to be a source of SE enhancement.Possibly,as peers and as people one interacts with daily,this type of SS group provides more ego reinforcement,more relevant to one's situation in college,than might be offered by family or a close friend whose "TLC" is especially beneficial to people shattered by a traumatic life-event.

Because of the disproportionate numbers of PHYS and PSYCH symptoms in the test,comparison is difficult;taking it into account,our findings are consistent with the few comparative studies done in which PHYS symptoms are more effectively buffered by SS.

APPENDIX A

THE QUESTIONNAIRE

Please take 15-20 minutes to complete this anonymous questionnaire. It should be fun! Please keep in mind that it is the basis of my Senior Honors Project and my data must be as complete and accurate as you can make it. Thank you in advance; I would not be able to do this study without your cooperation.

For questions 1 through 40 please check either YES or NO as frankly as possible. You may want to compare yourself now to early in the semester.

		YES	NO
1.	I am more tired than usual these days.		
2.	I am more irritable than usual nowadays.		
3.	Nowadays I want to spend more time by myself.		
4.	I spend more time than usual watching T.V., or engaged in light reading.		
5.	I feel restless & find it difficult to concentrate without my mind wandering.		
6.	I find it increasingly difficult to make decisions.		
7.	I worry more these days about little things.		
8.	I am aware of an increase in minor illnesses.		
9.	I suffer more from aches & pains which do not appear to result from physical exercise.		
10.	I have allergy flare-ups or an increase in the frequency of headaches.		
11.	My mood swings more to the negative; I tend more to see the bad side of things.		
12.	I am increasingly forgetful of commitments, appointments, and valuables.		
13.	I work harder but accomplish less than I used to.		
14.	I keep putting off things that have to be done.		
15.	I often feel bored these days.		
16.	I do not look forward to doing anything.		
17.	I find it hard to sit still; I tend to move around more without purpose.		

18. My willpower is decreasing(I find myself being a [illegible] or eating more/[illegible]/etc.)

19. I lose control of my emotions more easily(tantrums, crying spells,hysterical laughter,etc.).

20. I distance myself more from my fellow students.

21. I do my work according to policy and procedure, not seeking innovation or creativity any more.

22. I do the minimum amount of work necessary;I now look for the easy way out.

23. I blame others for things that go wrong,for my mistakes.

24. I spend less time now dressing & grooming myself;I feel fairly dishevelled & sloppy.

25. I am suffering from a chronic illness such as diabetes,ulcers,high blood pressure,colitis,or migraines.

26. I am constantly tired.

27. I sleep more than I need to or feel sleep not restful.

28. I seriously question the worth of my efforts.

29. I seriously consider leaving the situation which I see as the source of my problems.

30. I have increased absenteeism from class.

31. I feel that others do not appreciate my efforts or sympathize.

32. I am constantly depressed.

33. I have a serious drug,alcohol,or eating problem.

34. I want to sleep all day & hope my problems will just disappear.

35. It seems as though there is no joy & nothing to live for anymore.

36. I feel I am losing touch with reality.

37. I frankly don't care what happens at this stage;I just want to be left alone.

38. I want someone to take me by the hand and look after me.

39. I have had a nervous breakdown, or considered suicide or homicide seriously.

40. I associate myself here with a peer group I have most fun with.

41. I have one or two close friends I like to spend time alone with.

42. I strongly believe in keeping in touch with friends from back home.

43. I tend to make new friends in a new place who can substitute (temporarily at least) for those I have left.

44. I like to stick to the same friends throughout college; it generally upsets me for a long time when a friend transfers or graduates.

45. When my former friends leave I easily make new attachments.

46. I am an outgoing person who is really quite popular here.

47-59 Please indicate whether or not you have felt negatively affected by any of the following experiences. Please add any other recent life-events in the last 12 months that have had a negative impact upon you.

47. Divorce in immediate family.

48. Death of a close family member.

49. Personal injury or illness.

50. Illness of family member.

51. Pregnancy/abortion.

52. Sex difficulties.

53. Financial difficulties (for you or your parents).

54. Change in number of family get-togethers.

55. Failing an important exam.

56. Failing a course.

57. Change to a new school.

58. Leaving home for the first time.

59. Others (please indicate).

....

....

....

60. Do any of these still bother you?

For questions 61 through 77 please check which of the following 4 levels most accurately describes you:

rarely sometimes often usually
(0-15%)(16-50%)(51-85%)(86-100%)

61. I phone or write my relatives back home.

62. My friends or relatives from back home phone or write me.

63. During the semester I go visit friends & relatives at home.

64. My friends & relatives from home come visit me here.

65. Other students on my hall visit me in my room.

66. I visit other students in their rooms.

67. I try to see & do things outside of class with students taking the same courses as I.

68. I participate in club activities &/or in a sporting or special interest group.

69. I do things with other members of a club or group in addition to the activities this club or group organizes.

70. At times I wish to confide in someone,or go cry on someone's shoulder,but there doesn't seem to be anyone I can call or go to comfortably.

71. When I have problems here(personal,academic,social,etc),my friends & relatives back home are helpful.

72. I feel I can discuss my personal problems and share my secrets with my roommate(s). (check 0-15% if no roommate).

73. I have an intimate boyfriend with whom I can always discuss my personal problems.

74. When my friends hear of my problems (academic,social,family,etc)they tend to blame and criticize me more than support me.

75. When I take troubling problems to a faculty advisor (e.g., a personality clash w/ a professor or roommate, health or emotional upset) they tend not to be very helpful or supportive.

76. There is someone I can talk to whenever something bothers me greatly who will be supportive.

77. When trying a new sport or physical activity for the first time, I feel I do not succeed as well on the average.

78. When I try to meet important goals of any kind, I feel I have really succeeded.

79. When required to direct the activities of others, I fail to receive their cooperation and respect.

80. When I attempt to get someone of the same sex to form a favorable impression of me, I usually feel I am unsuccessful.

81. People of my age and sex tend to have a more pleasing personal (physical) appearance than I do.

82. In situations where it is necessary for me to speed up my performance to meet a deadline, I can do it without sacrificing the quality of my work.

83. When I enter a new college course, I feel uncertain I will do as well as my colleagues.

84. When doing things that interest me most, I feel dissatisfied with my performance.

85. When I am a part of group activities, my ideas & opinions influence the group.

86. When put in a situation which is new & unfamiliar, I feel I am not able to function adequately.

87. When I have to take the initiative & act independently of others, I can handle things on my own.

88. When wise, careful judgement is needed, I make the right decision.

89. Given questions 77-88 -- [illegible] the background of the research,would your scoring have been somewhat different?If "yes",how would you have answered differently(briefly)?

[illegible] 1 of 7 3-6-74

90. How many people could you comfortably approach on campus to borrow $5?

91. Imagine you are troubled & feel the need to talk to someone(maybe a personal complaint,a confession,etc.).How many people could you entrust here with such a personal problem?

92. How many people could you comfortably call up late at night (after midnight)to talk to if something was troubling you?

For each item check either TRUE or FALSE.It is important to check all items. TRUE FALSE

93. At times I feel like swearing.

94. At times I feel like smashing things.

95. I think a great many people exaggerate their misfortunes in order to gain the sympathy & help of others.

96. It takes a lot of argument to convince most people of the truth.

97. I have very few contacts with members of my family.

98. Most people will use somewhat unfair means to gain profit or an advantage rather than lose it.

99. Often I can't understand why I have been so cross & grouchy.

100. At times my thoughts have raced ahead faster than I could speak them.

101. Criticism or scolding hurts me terribly.

102. I certainly feel useless at times.

103. I have never felt better in my life than I do now.

104. What others think of me does not bother me.

105. It makes me uncomfortable to put on a stunt at a
party even when others are doing the same thing.

106. I find it hard to make talk when I meet new
people.

107. I am against giving money to beggars.

108. I frequently find myself worrying about something.

109. I get mad easily then get over it soon.

110. When in a group of people,I have trouble thinking
of the right thing to say.

111. I think nearly anyone would tell a lie to stay
out of trouble.

112. I worry over money & business.

113. At periods,my brain seems to work more slowly
than usual.

114. People often disappoint me.

115. I have often met people who were supposed to be
experts,who were no better than I.

116. I have sometimes felt difficulties were piling
up so high I couldn't overcome them.

117. I often think:"I wish I were a child again."

118. I find it hard to set aside a task that I have
undertaken,even for a short time.

119. I like to let people know where I stand on things.

Please put this questionnaire in my intercampus box after completing
it.Thank you again for your cooperation.

– Deirdre Platt

APPENDIX B

RESPONSE DATE

A P P E N D I X E

CODEBOOK : The effects of social support and self-esteem on stress in college students.

Questionnaire item # and description	Variable #	Aggregate variable	Response level
- Data number	001	----	70 - 323
1 More tired than usual	002	Stress(phys)	Yes = 1
2 More irritable	003	" (psych)	
3 Want to be by myself more	004	" "	No = 0
4 More TV/light reading	005	"	
5 Restless/lacking concentration	006	"	
6 More difficulty making decisions	007	"	No resp=0
7 Worry more about little things	008	Stress(psych)	
8 Aware of increase minor illnesses	009	" (phys)	
9 Aches & pains(not from exercise)	010	" "	
10 Allergy flare-ups/headaches	011	" "	
11 Negative mood/seeing worst side	012	"(psych)	
12 Forgetful of commitments etc	013	"	
13 Working harder but doing less	014	"	
14 Putting off what must be done	015	"	
15 Often bored	016	"	
16 Not looking forward to anything	017	"	
17 Unable to sit still	018	"	
18 Decreasing will-power	019	"	
19 Losing control of emotions	020	" (psych)	
20 Distancing oneself from others	021	" "	
21 Working without initiative	022	"	
22 Looking for easy way out	023	" "	
23 Blaming others for your mistakes	024	"	
24 Spending less time dressing etc	025	"	
25 Suffering from chronic illness	026	" (phys)	
26 Constantly tired	027	" "	
27 Sleeping more/sleep not restful	028	" "	
28 Questioning worth of efforts	029	"	
29 Considering leaving situation	030	"	
30 Increased absenteeism from class	031	"	
31 Others unsympathetic	032	"	
32 Constantly depressed	033	" (psych)	
33 Serious problem of eating/etc	034	" "	
34 Wanting to sleep all day	035	"	
35 Nothing to live for anyway	036	" "	
36 Losing touch with reality	037	" "	
37 Wanting to be left alone	038	" "	
38 Wanting to be taken by hand	039	" "	
39 Nervous breakdown/suicide attempt	040	" "	
		Social support	
40 Good fun with peer group	041	SS(pop)	Yes = 1
41 Spend time with 1-2 close friends	042	"(conf)	
42 Keeps contact w/ friends back home	043	"(conf)	No = -1
43 New friends substitute for former	044	"(pop)	
44 Remains upset after friend leaves	045 (-)	"(conf)	No resp=0
45 Easily makes new friends	046	"(pop)	
46 Outgoing and popular here	047	"(pop)	

```
                                                      Brief
47 Divorce in family                     048          Brief        Yes = 1
48 Death in family                       049             "
49 Personal illness/injury               050             "         No = 0
50 Illness of family member              051             "
51 Pregnancy or abortion                 052             "      No resp=0
52 Sex difficulties                      053             "
53 Financial difficulties                054             "
54 Change in number family reunions      055             "
55 Failed important exam                 056             "
56 Failed course                         057             "
57 New school                            058             "
58 Left home first time                  059             "
59 Other negative experience(s)          060             "     Yes=# of exp.
60 Still bothered by any of above        061             "
                                                      Social support
61 Phone/write back home                 062             " (conf) Rarely=1
62 People from home call or write        063             " (conf)
63 Visits friends/relatives at home      064             "   "  Sometimes=2
64 Visited by friends or relatives       065             "   "
65 Other students visit my room          066             "  (por)   Often=3
66 Visit other students                  067             "     "
67 Activities w/course-mates             068             "     "   Usually=4
68 Participate in clubs,sor.,etc         069             "     "
69 Other activities w/club members       070             "     "   No resp=5
70 No one to call up to confide to       071 (-)         " (conf)
71 People back home helpful to me        072             "     "
72 Can discuss problems w/ roommate      073             "     "
73 Can discuss problems w/ boyfriend     074             "     "
74 Friends blame more than support       075 (-)         "     "
75 RA/Faculty adviser not helpful        076 (-)         "     "
76 Someone supportive always             077             "     "
                                                      Self-esteem
77 Do not succeed in phys. activity      078 (-)         "         Rarely=1
78 Succeed in meeting goals              079             "
79 Fail to receive cooperation           080 (-)         "      Sometimes=2
80 Do not succeed in impressing          081 (-)         "
81 Less pleasing appearance              082 (-)         "          Often=3
82 Can speed up work & keep standard     083             "
83 Uncertain of succeeding in course     084 (-)         "        Usually=4
84 Dissatisfied w/ performance           085 (-)         "
85 Ideas & opinions influence group      086             "        No resp=1
86 Cannot function in new situation      087 (-)         "
87 Handle things OK when in charge       088             "
88 Make right decision when needed       089             "
89 Different answers early in Fall       090                    Yes=1; No=0
                                                      Social support
90 # people I might borrow $5 from       091             " (por)   None=1
91 # people I could confide in           092             " (conf)   1-2=2
92 # I could call late at night          093              "    "    3-6=3
                                                                   More=4
                                                      "Faking-good"
93 Feel like swearing at times           094             "          True=0
94 Feel like smashing things             095             "
95 People exaggerate misfortunes         096             "         False=1
96 People are hard to convince           097             "
97 Very few quarrels w/ family           098             "       No resp=0
98 People use unfair means               099             "
99 Cannot understand why I'm grouchy     100             "
100 Thoughts race ahead of words         101             "
```

101	Terribly hurt by criticism	102	"
102	Feel useless at times	103	"
103	Have never felt better than now	104	"
104	Not bothered by what others think	105	"
105	Uncomfortable putting on stunt	106	"
106	Hard to talk to strangers	107	"
107	Against giving money to beggars	108	"
108	Frequently worried	109	"
109	Get mad easily & over it soon	111	"
110	Trouble thinking of what to say	112	"
111	People lie to avoid trouble	112	"
112	I worry about money & business	113	"
113	Mind sometimes works more slowly	114	"
114	Often disappointed w/ people	115	"
115	Experts often no better than me	116	"
116	Difficulties piling up too high	117	"
117	Often wish I were child again	118	"
118	Hard to set aside task unfinished	119	"
119	Let people know where I stand	120	"

NB:the (-) after variable # indicates an inversion of the scores of that particular item.

A P P E N D I X D

PLOTS - HISTOGRAMS - TABLES

Table I:Percentages of respondents in high,medium and low categories for the variables Stress,SE and SS.

	High	Medium	Low	Extra-low
Stress 26<h 14<m<26 0<l<13	6.5% (10)	45.1% (69)	48.4% (74)	
SE 3.5<h<3.9 3.0<m<3.49 2.0<l<2.9	18.3% (28)	51.3% (77)	29.4% (45)	1.9% (3)
SS 9.0<h<15 6.0<m<9.0 -1<l<6.0	47.0% (72)	29.4% (45)	23.5% (36)	

Table II:Levels of Self-esteem and Social support by level of Stress.

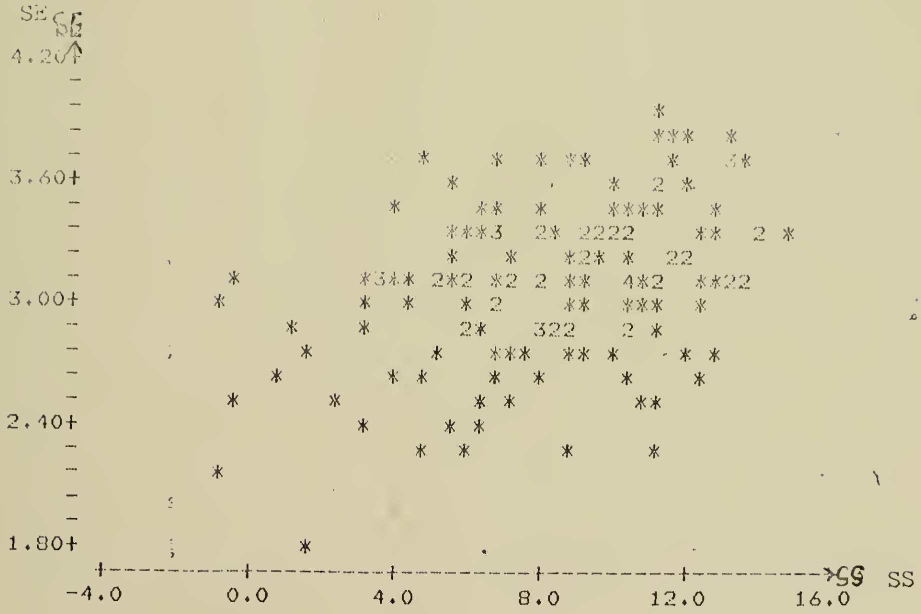
		Stress		
		low	medium	high
		% (N)		
	low	35.4(16)	58.3(26)	6.3(3)
SE	med	46.7(36)	47.3(38)	5.1(3)
	hi	71.4(20)	28.5(8)	0.0(0)
	low	30.5(11)	58.3(21)	11.1(4)
SS	med	46.5(20)	48.8(21)	4.4(2)
	hi	55.5(40)	37.5(27)	6.9(5)

```
[illegible]

Middle of     Number of
interval      observations
   [illegible]
   0              2         **
   4             10         **********
   8             24         ************************
  12             38         **************************************
  16             32         ********************************
  20             20         ********************
  24             17         *****************
  28              7         *******
  32              2         **
  36              1         *

       SP
   0              5         *****
   2              4         ****
   4             15         ***************
   6             30         ******************************
   8             27         ***************************
  10             32         ********************************
  12             28         ****************************
  14             12         ************

       SE
 1.8              1         *
 2.0              0
 2.2              2         **
 2.4              6         ******
 2.6             13         *************
 2.8             15         ***************
 3.0             41         *****************************************
 3.2             24         ************************
 3.4             23         ***********************
 3.6             21         *********************
 3.8              6         ******
 4.0              1         *

       FDP
  -3              2         **
  -2              3         ***
  -1              5         *****
   0             10         **********
   1             10         **********
   2             39         ***************************************
   3             25         *************************
   4             28         ****************************
   5             20         ********************
   6             12         ************

      DUNF
   4              1         *
   5              5         *****
   6             10         **********
   7             17         *****************
   8             20         ********************
   9             22         **********************
  10             22         **********************
  11             23         ***********************
  12             20         ********************
  13             11         ***********
  14              2         **
```

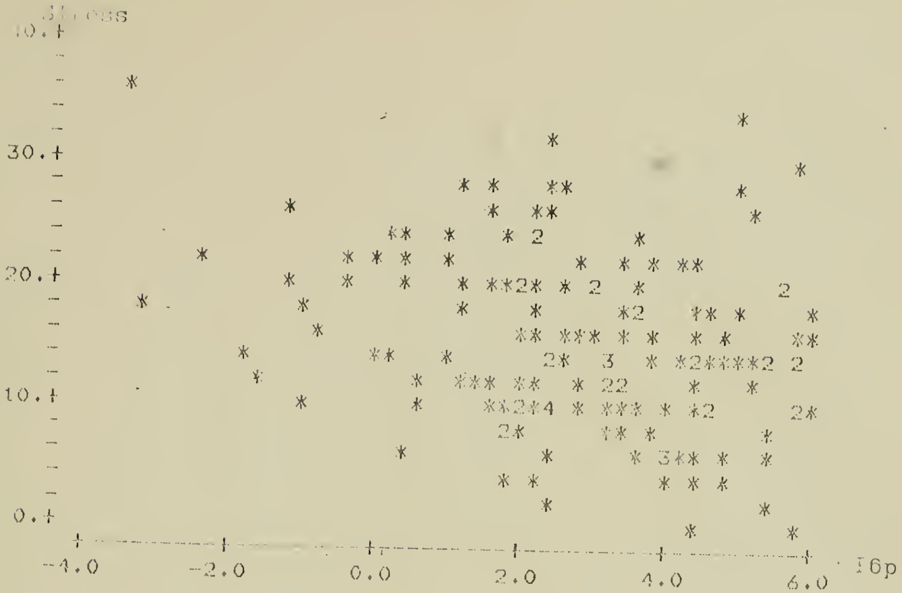
```
   [illegible]
  0                 24          ************************
  1                 25          *************************
  2                 20          ********************
  3                 26          **************************
  4                 22          **********************
  5                 16          ****************
  6                 10          **********
  7                  5          *****
  8                  4          ****
  9                  4          ****

           [illegible]
  3                  2          **
  4                  0
  5                  2          **
  6                  6          ******
  7                  9          *********
  8                 16          ****************
  9                 16          ****************
 10                 15          ***************
 11                 11          ***********
 12                 12          ************
 13                 12          ************
 14                 23          ***********************
 15                  8          ********
 16                  6          ******
 17                  3          ***
 18                  6          ******
 19                  2          **
 20                  1          *
 21                  1          *
 22                  1          *


The following histograms represent the distribution of Stress in subj-

ects grouped by different levels of SS,SE,Pop,Conf,Crisis or K-scores.

Middle of     Number of
interval      observations.

Stress in above and below median SS groups.
Stress in Low SS;mean=16.1
   0                 0
   4                 1          *
   8                11          ***********
  12                21          *********************
  16                12          ************
  20                14          **************
  24                12          ************
  28                 4          ****
  32                 0
  36                 1          *
```

```
Stress in All Ss(mean=15.2
   0             2          **
   4             9          *********
   8            13          *************
  12            17          *****************
  16            20          ********************
  20             6          ******
  24             5          *****
  28             3          ***
  32             2          **
  36             0

Stress in Low,Med,and High SS respectively:means 18.14,14.45,& 12.78.
   0             0
   4             0
   8             3          ***
  12            10          **********
  16             4          ****
  20             6          ******
  24             9          *********
  28             3          ***
  32             0
  36             1          *



   0             0
   4             1          *
   8             8          ********
  12            12          ************
  16            12          ************
  20             7          *******
  24             2          **
  28             1          *
  32             1          *
  36             0



   0             2          **
   4             9          *********
   8            13          *************
  12            16          ****************
  16            17          *****************
  20             6          ******
  24             5          *****
  28             3          ***
  32             1          *
  36             0

Stress in above and below median SE groups.
Stress in Low SE:mean = 16.3
  0              0
  4              2          **
  8              9          *********
 12             19          *******************
 16             17          *****************
 20             15          ***************
 24              9          *********
 28              5          *****
 32              1          *
 36              1          *
```

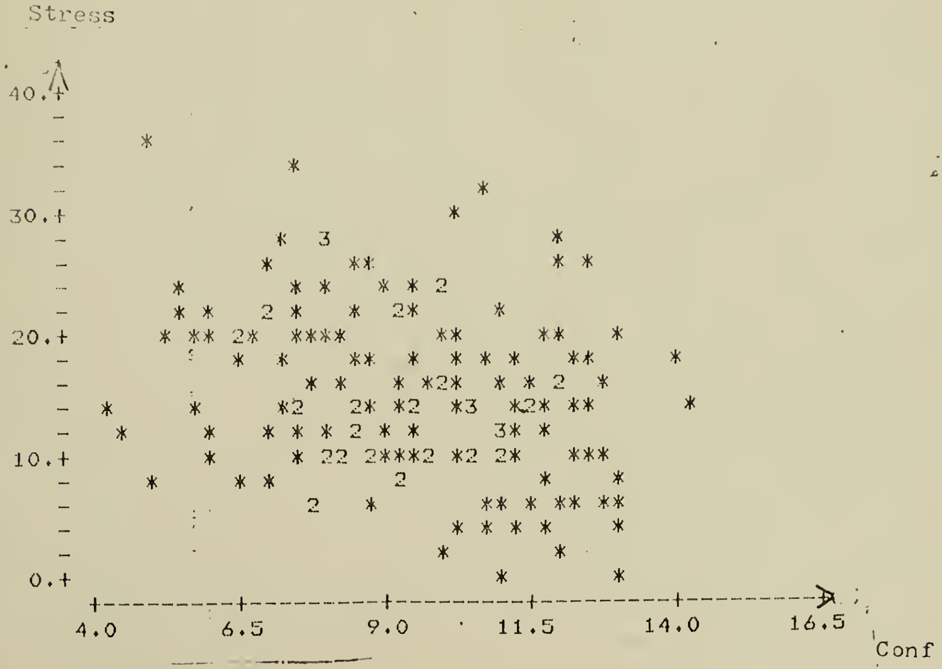
```
Stress in High SE:mean = 12.8
  0             2       **
  4             8       ********
  8            15       ***************
 12            19       *******************
 16            15       ***************
 20             5       *****
 24             8       ********
 28             2       **
 32             1       *
 36             0

Stress in Low SS & Low SE group(below median):mean = 17.6
  0             0
  4             0
  8             4       ****
 12            14       **************
 16             6       ******
 20            12       ************
 24             8       ********
 28             4       ****
 32             0
 36             1       *

Stress in above and below median Pop.
Stress in Low Pop:mean = 16.1
  0             0
  4             3       ***
  8            12       ************
 12            19       *******************
 16            10       **********
 20            13       *************
 24            12       ************
 28             5       *****
 32             1       *
 36             1       *

Stress in High Pop:mean = 13.1
  0             2       **
  4             7       *******
  8            12       ************
 12            19       *******************
 16            22       **********************
 20             7       *******
 24             5       *****
 28             2       **
 32             1       *
 36             0

Stress in High Conf:mean = 16.2
  0             2       **
  4            10       **********
  8            13       *************
 12            12       ************
 16            23       ***********************
 20             7       *******
 24             4       ****
 28             3       ***
 32             1       *
 36             0
```



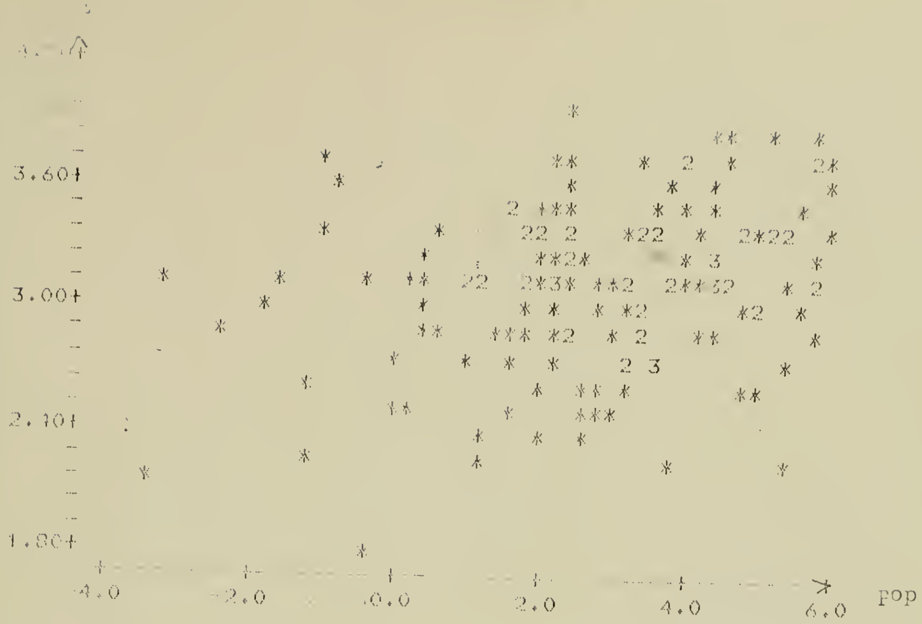
Self-esteem in function of Social Support:r=.40



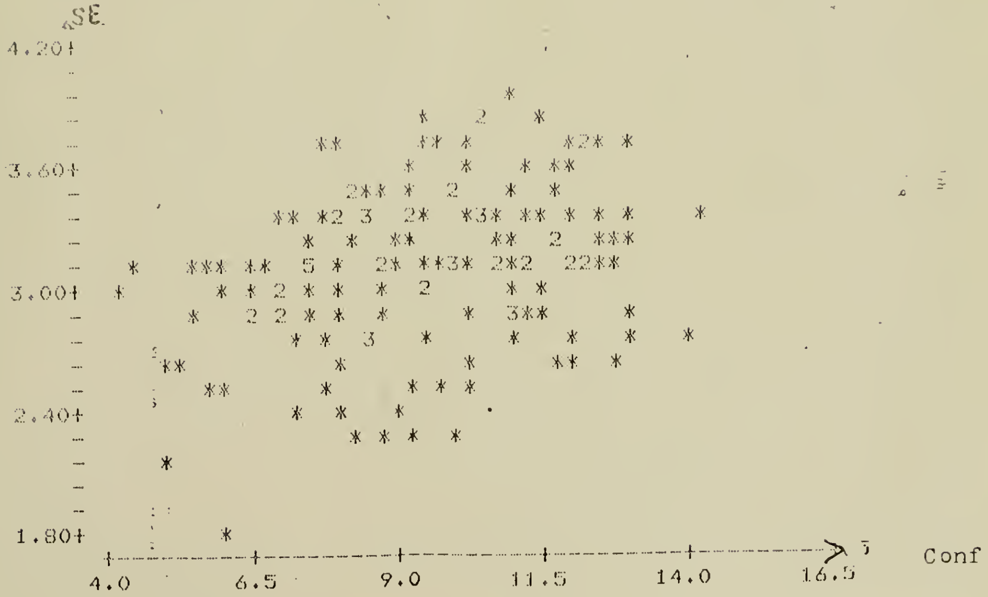
Stress in function of Pop:r=-.25



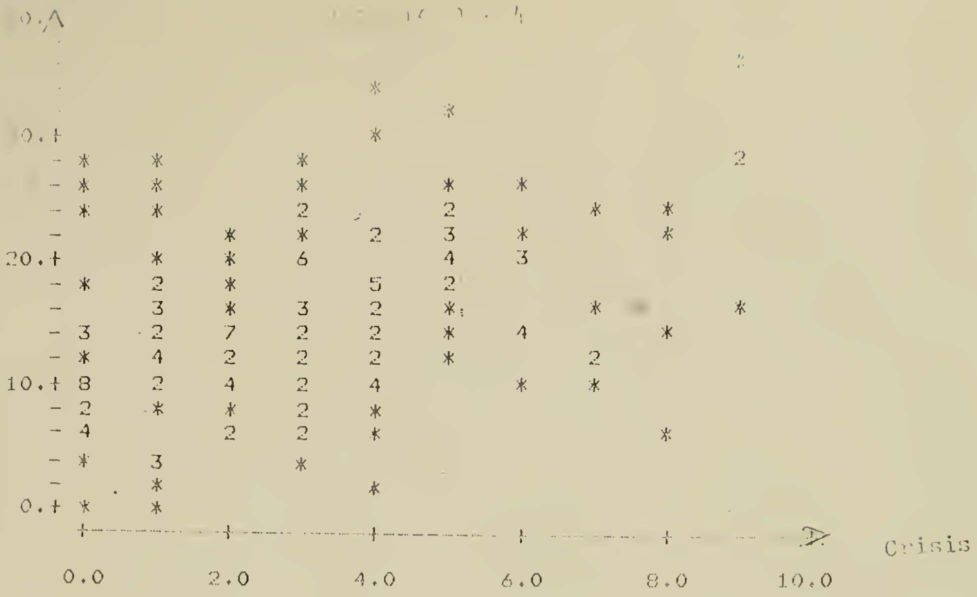
Stress in function of Conf:r=-.28



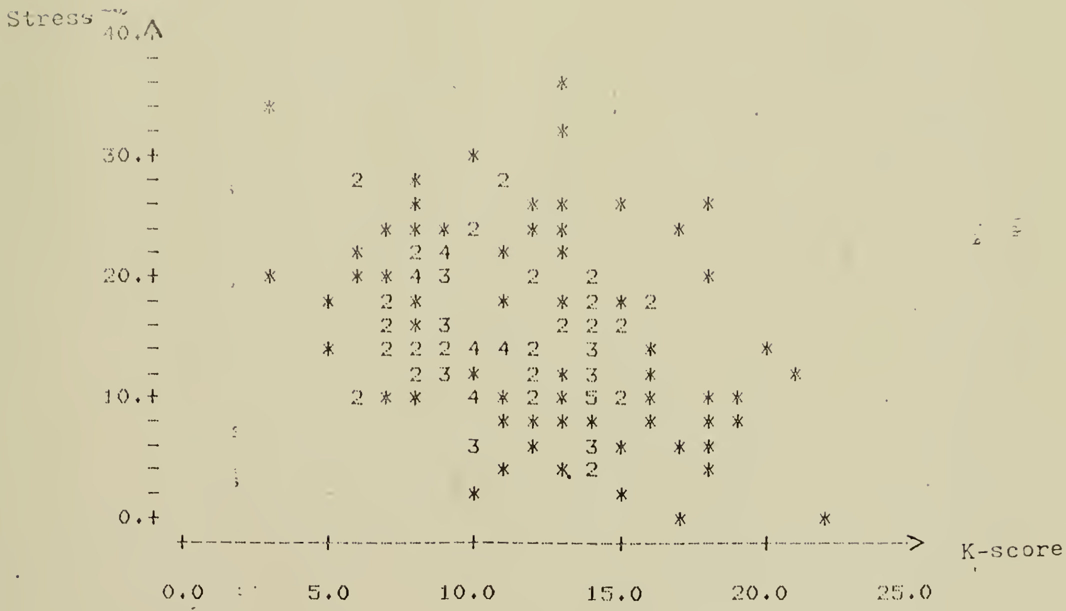
SE in function of Pop:r=.31



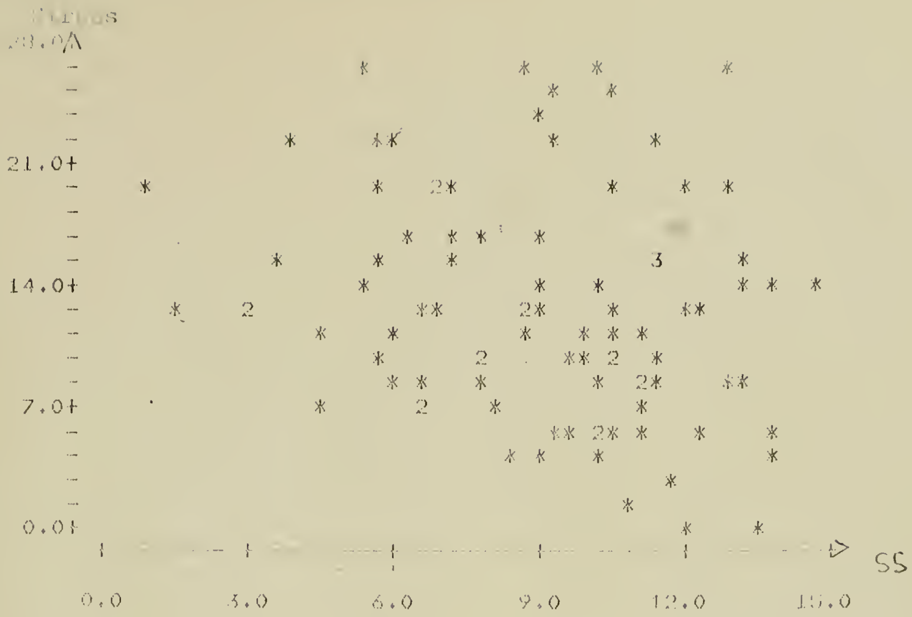
SE in function of Conf:r=.31



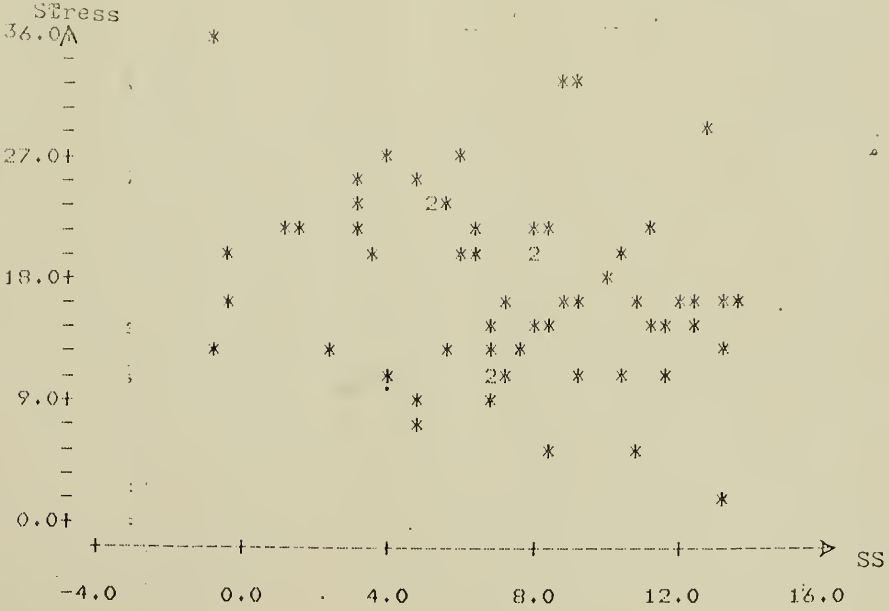
Stress in function of Crisis:r=.39



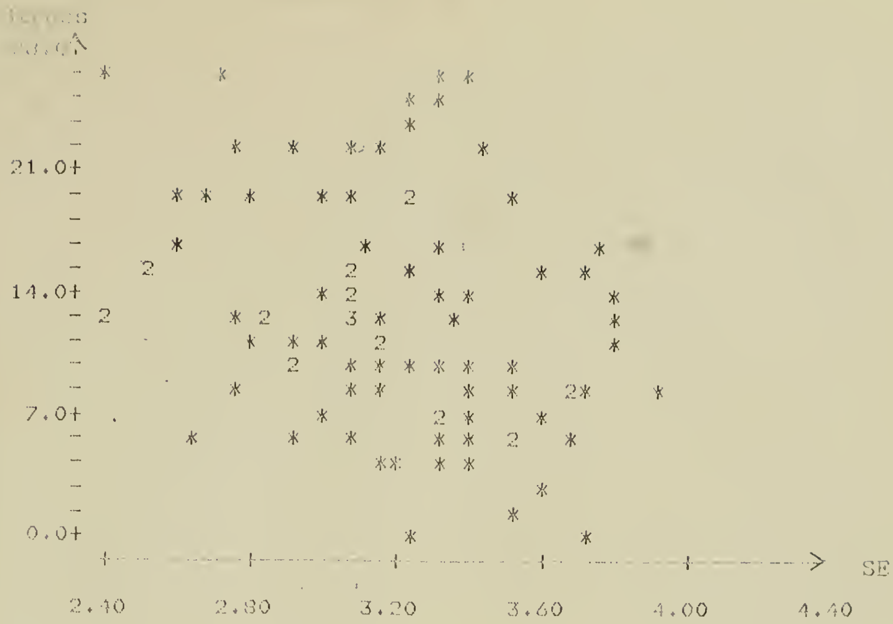
Stress in function of K-score:r=-.36



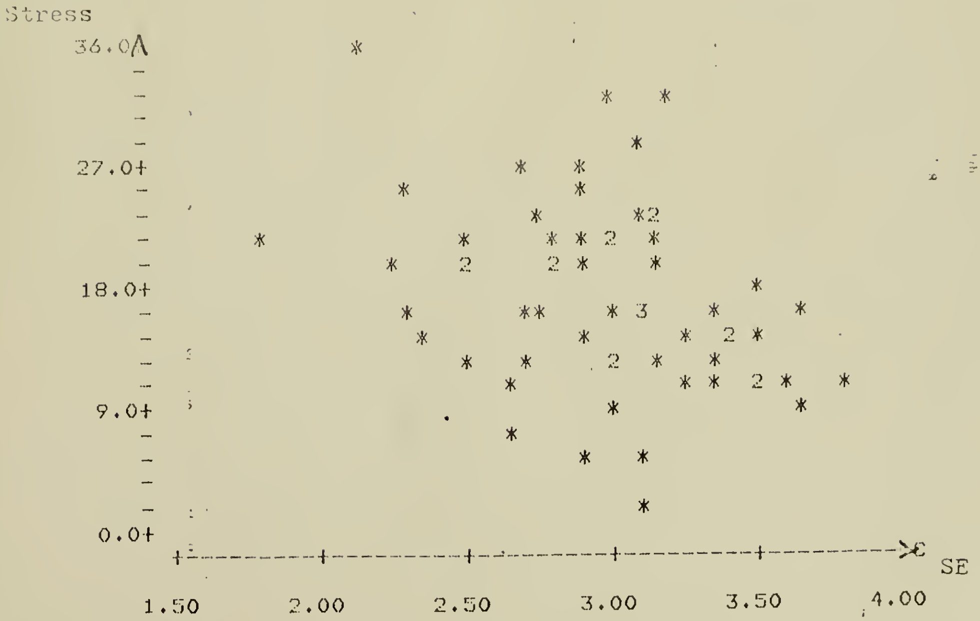
a) Stress in function of SS in High Crisis group:r=-.26



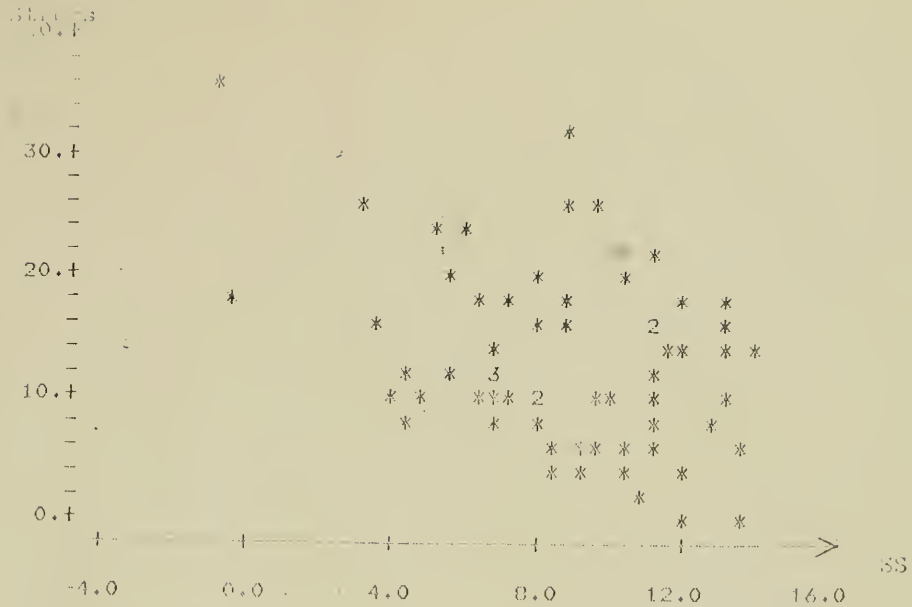
b) Stress in function of SS in Low Crisis group:r=-.23



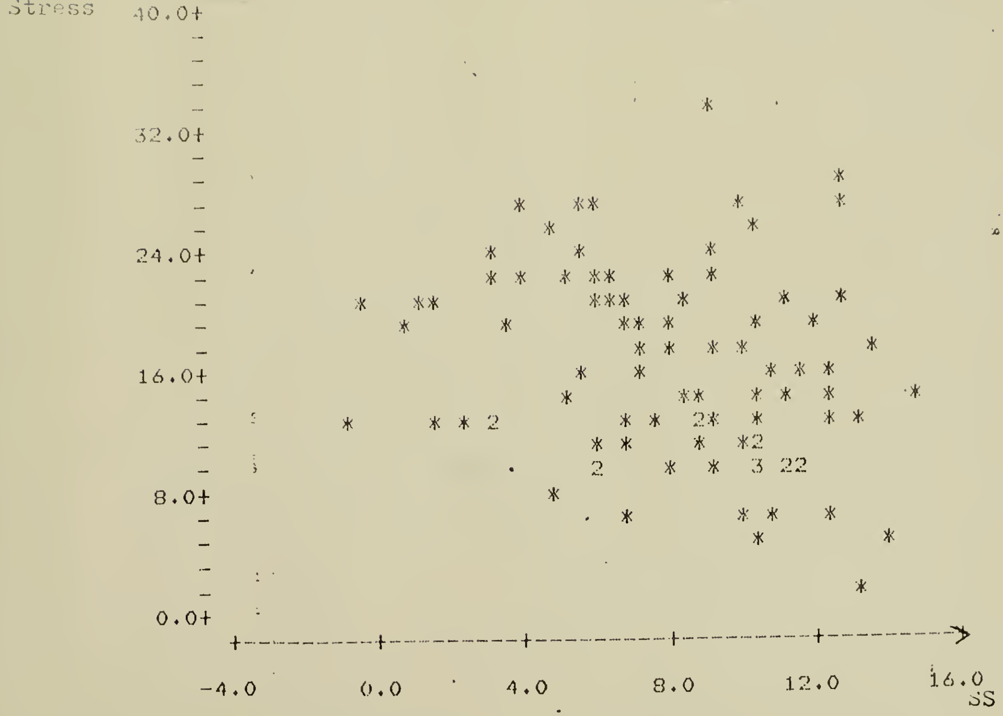
a) Stress in function of SE in High Crisis group:r=-.33



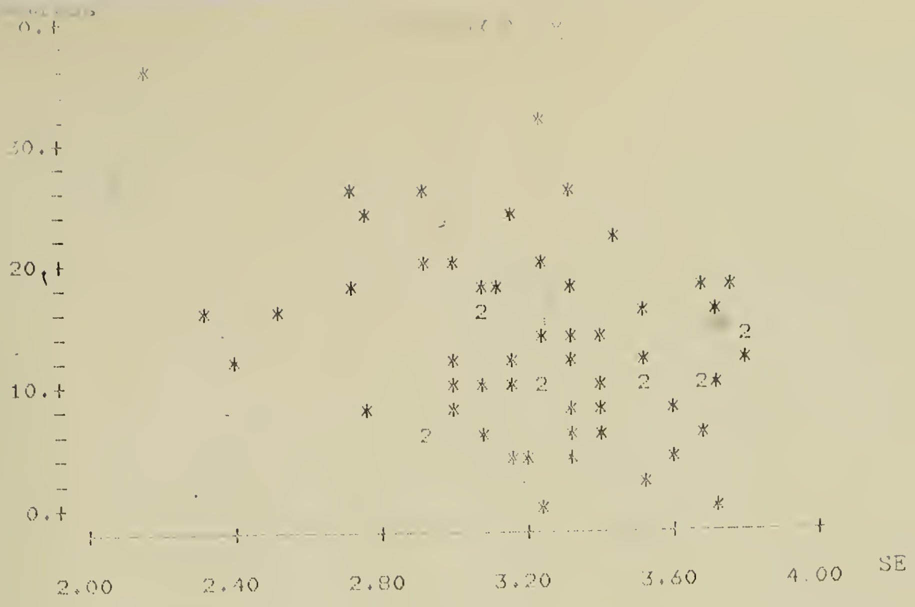
b) Stress in function of SE in Low Crisis group:r=-.27



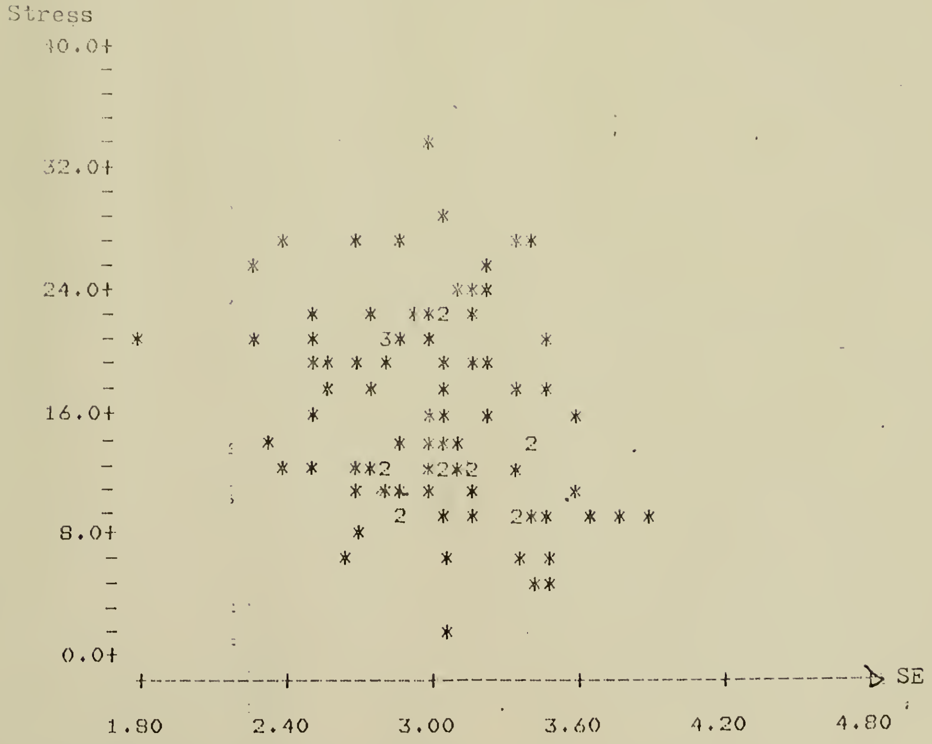
a) Stress in function of SS in High K-score group:r=-.36



b) Stress in function of SS in Low K-score group:r=-.25



a) Stress in function of SE in High K-score group:r=-.36



b) Stress in function of SE in Low K-score group:r=-.27

May 6th 198

This is a memo to all the students to whom I gave a questionnaire related to my Honor's thesis on Stress late last Fall. I wish to thank all who took the time to complete and return this survey to me and share with you some of my findings in this short summary. If you are curious for more details, please ask. I have posted on the bulletin board in the dining hall a copy of the questionnaire with section headings for the questions and the percentages of "YES"s, "NO"s, "TRUE"s, "FALSE"s, etc for each quetion.

In this study I examined the effect of Social support (friends, family, social life) and Self-esteem upon Stress in SBC students. I predicted that the physical and/or mental disrders would be highest in students low in Support and/or Self-esteem, and lowest in those with high Support and Self-esteem; also that Support and Self-esteem would tend to either both be low or both high.

our data supported these hypotheses, and suggestes that Self-esteem is more directly associated with Stress while Support emerged as a valuable but not indespensable "ingredient" to a college life relatively free of health problems. I will not bore the non-statisticians among you by talking about regressions, partial correlations, or one-tailed t-tests at given levels of significance, but if you are here next year it is all in my thesis in the library.

From these results I might recommend that students suffering from psychological or physical disorders examine their social life and their relationships with the group or individuals with whom they spend the most time. The student may benefit from another social support group that will offer her more encouragement and praise, reinforcing her self-confidence. According to my findings, a friend need not be someone with whom you can (or must) share every secret and discuss personal problems to be a protection against stress.

Those who seem unable to find satisfactory feedback from a social group may do better to invest time and effort in an activity which they enjoy and do well, and build up their self-esteem independently of the judgement of peers or family. I realise now, looking back at my highschool years, how this worked for me when I discovered an ability in myself that the entire family scorned not to say "condemned") when I had to do a 3K run for my PE A-level, and continued to run ever since because I could take such pride in my fitness.

Incidentally, since I have been asked this many times, I am not a Psychology major nor have I taken any courses; my actual major is Human Ecology coordinated with Environmental Studies and the first I heard about Stress concerned overcrowding amongst rats!

Thank you again and please do not hesitate to contact me for details,

Deirdre Platt

¬L

REFERENCES

¬L

Berkman & Syme
1981 "Social networks, host resistance and mortality." American Journal of Epidemiology 109:186-204.

Bradburn, Norman M. & Caplovitz, David
1965 Reports on happiness. Chicago: Aldine Books.

Brown, G., Bhrolcain M., Morris T.
1975 "Social class and psychiatric disturbance among women in an urban population." Sociology 9:224-252.

Caplan, Gerald
1974 Support System and Community Mental Health. New York: Behavioral Publications.

Cassel, J.
1974 "Psychosocial processes and "stress". Theoretical formulation." International Journal of Health Services 4:471-482.
1976 "The contribution of the social environment to host resistence." American Journal of Epidemiology 104:107-123.

Chun, Ki-Taek
1975 Measures for psychological assessment: a guide to 3000 original sources and their applications. Ann Arbor, MI: Survey Research Centre, Institute for Social Research.

Cobb, S.
1976 "Social support as a moderator of life stress." Psychosomatic Medecine 138:300-314.

Cooke D.J. & Greene J.G.
1981 "Types of life-events in relation to symptoms at the climacterium." Journal of Psychosomatic Research 25:5-11.

Dean A. & Lin N.
1977 "The stress buffering role of social support." Journal of Nervous and Mental Disease 765:403-417.

Drabek T.E., Key W., Erickson P. & Crowe J.
1975 "The impact of disaster on kin relationships." Journal of Marriage and the Family 37:481-494.

Eaton, William W.
1978 "Social supports and psychiatric symptoms: a reanalysis of the New Haven data." Journal of Health and Social Behavior 19:230-234.

Frydman, M.
1981 "Social support, life-events and psychiatric symptoms: A study of direct, conditional and interaction effects." Social Psychiatry 16:69-79.

Gibbs & Martin
1958 "Status integration and its relation to suicide." American Sociological Review 23:140-147.

Gore, Susan
1978 "Effects of social support in moderating the health consequences of unemployment." Journal of Health and Social Behavior 19:157-167.

Gurin G., Veroff J. & Feld S.
1960 Americans view their Mental Health: a National Survey. New York: Basic Books.

[illegible]
1977"[illegible] and Life Stress."

[illegible]
1980"Social networks,social resistance and mortality"Developmental Medicine and Child Neurology 22:391-400.

Hellriegel [illegible]
1981"Are you a potential burnout?"Training and Development Journal Oct:25-28.

Hotaling G.,Atwell S. & Linsky A.
1978"Adolescent life changes and illness:a comparison of 3 models,"Journal of Youth and Adolescence 7:[illegible]

Jacobs,Spilken & Norman
1969"Relationship of life change,maladaptive aggression,and upper respiratory infection in male college students"Presented at the annual meeting of the American Psychosomatic Society Massachusetts.

Jenkins C.D.
1979"Psychosocial modifiers of response to stress,"
Journal of Human Stress 5:3-15.

[illegible]
1979"[illegible] implications."Social Work 24:485-490.

Kahn,Robert L.,Wolfe D.M.,Quinn R.P.,Snoek J.D. & Rosenthal R.A.
1964 Organizational Stress:Studies in Role Conflict and Ambiguity.New York:John Wiley & Sons.

La Rocco,House & French Jr.
1980"Social support,occupational stress and health,"Journal of Health and Social Behavior 21:202-218.

Lin N.,Simeone R.,Ensel W. & Kuo W.
1979"Social support,stressful life events,and illness:a model and an empirical test."Journal of Health and Social Behavior 20:108-119.

Lindenthal J.,Thomas & Myers
1971"Perception of primary and secondary support from social allies in time of crisis."Journal of
Nervous and Mental Disease 153:92-98.

[illegible]
1967"Social interaction and the utilization of a psychiatric outpatient clinic."Journal of Health and Social Behavior 8:7-14.

Maslach,Christine
1976"Burned-out,"Human Behavior:16-21.

Mechanic,David
1975"Sociocultural and social-psychological factors affecting personal responses to psychological disorder."Journal of Health and Social Behavior 16:393.
1976"Stress,illness,illness behavior,and the use of health services."Journal of Human Stress 2:27-40.
1978"Effects of psychological distress on perceptions of physical health and use of medical and psychiatric facilities."Journal of Human Stress 4:26-32.

Mechanic David & Greenley
1976"The prevalence of psychological distress and help-seeking in a college student population."Social Psychiatry 11:1-14.

Medalie J.H. & Goldbourt U.
1976"Angina pectoris among 10,000 men.Psychosocial and other risk factors as evidenced by a multivariate analysis of a 5-year incidence study."American Journal of Medicine 60:910-921.

Miller P. & Ingham J.
1976"Friends,confidants and symptoms."Social Psychiatry 11:51-58.

Miller P.,Ingham J. & Davidson S.
1976" [illegible] ."Journal of Psychosomatic Research 20:515-522.

Minkler & Biller
1979"Role shock:a tool for conceptualizing stresses accompanying disruptive role transitions."Human Relations 32 [illegible]

[illegible]
1979"Social integration and the utilization of a psychiatric outpatient clinic."Journal of Health and Social Behavior 20:108-117.

Nuckolls K.B.,Cassel J. & Kaplan B.H.
1972"Psychosocial assets,life crises,and the prognosis of pregnancy."American Journal of Epidemiology 95:431-441.

Paykel E.S.,Emms E.M.,Fletcher J. & Rassaby E.
1980"Life events and social support in puerperal depression."British Journal of Psychiatry 136:339-346.

Perry R. & Lindell M.
1978"The psychological consequences of natural disaster:a review of research on American communities."Mass Emergencies 3:105-115.

Rabkin J. & Struening E.
1976"Life events,stress,and illness."Science 194:1013-1020.

Rosenberg,Morris
1968 The Logic of Survey Analysis.New York:Basic Books.

Rutter,M.
1981"Stress,coping and development:some issues and some questions."Journal of Child Psychology and Psychiatry 22:323-356.

Selye,Hans
1956 The Stress of Life.New York:Mc-Graw Hill.

[illegible]
1979"Problems and solutions in the quality of working life in a various system."Human Relations 32:113.

Waldron,I.
1980"Type A behavior pattern:relationship to variation in blood pressure,parental characteristics,and academic activities of students."Journal of Human Stress 6:16-27.

Z

DATE DUE

MAY 15 1986

GAYLORD

PRINTED IN U.S.A.

Archives
158.1-P719e Unacc.

Platt, Deirdre Alexandra
AUTHOR

Effects of social support and
TITLE self-esteem upon stress in
female college students

DATE DUE	BORROWER'S NAME
MAY 15 1986	

Archives
158.1-P719e
Platt, Deirdre Alexandra

LIBRARY
SWEET BRIAR COLLEGE
SWEET BRIAR, VIRGINIA 24595

Unacc.

DEM